



## SEASON OF TICKS

*Don't Let Them Take a Bite Out of Your Summer*

With the blossoming of spring, it's time to lace up your hiking boots and head to the great outdoors. But first, take note. Every year thousands of adults, children and pets across the country are exposed to Lyme disease and other diseases carried by ticks. Simple precautions can help you avoid getting sick from these blood-feeding creatures.

In 1975, 51 people came down with a mysterious arthritis-like ailment in Lyme, Connecticut. Researchers discovered that the disease was caused by small, coiled bacteria called *Borrelia burgdorferi*, or simply Bb. The bacteria spread to humans from the bite of a tiny deer tick. The tick can be as small as a pinhead.

A deer tick can live on a variety of warm-blooded animals. Immature ticks favor small mammals, while adults tend to feed on white-tailed deer. The small mammals that ticks feed on can act as reservoirs for Bb, harboring it in their bloodstream. After a tick takes a blood meal from an infected animal, or host, the bacteria remain in the tick's gut throughout its life. The tick can then infect any new creature it feeds upon, including humans. However, transmission of Bb to a new host requires 24 to 48 hours.

That's why it's important to carefully check your body and clothing for ticks after being outdoors in woody and grassy areas. If you see a tick, you can lessen the chance of infection

by removing it from your body early, even if it's already begun to feed.



A bull's-eye shaped rash at the site of the tick bite is the most reliable early symptom of Lyme disease. It appears 3 to 32 days after a tick bite in 70-80% of cases. The rash has a dark spot in the center where the bite was, with a lighter color ring around the spot.



Other early symptoms of Lyme disease resemble those of the flu. Warning signs include fatigue, headache, joint stiffness, stiff or painful muscles, fever and swollen joints. If the disease progresses, symptoms such as irregular heartbeat, heart palpitations or neurological abnormalities can develop. In its most advanced stages, Lyme disease can be debilitating.

“Early treatment is the most effective way to clear the infection from the body,” says Dr. Joseph Breen of NIH’s National Institute of Allergy and Infectious Diseases. The key is to consult a health care provider as soon as you recognize any symptoms.

“Scientists are currently working to understand how Bb interacts with its host,” says Breen. “In addition, work is underway to develop more effective diagnostic tools and vaccines.”

Gardening, camping, hiking and just playing outdoors are all great spring and summertime activities. But make tick prevention a part of your routine.



## PREVENTING TICK- BORNE DISEASES

- Avoid walking in woody and bushy areas with high grass.
- Stay on groomed trails when hiking.
- Wear long, light-colored pants, sleeves and socks. Tuck your pant legs into your socks.
- Spray exposed body areas and clothing with tick repellent.
- Search your entire body for ticks after being outdoors and immediately wash your clothing.
- Safely remove ticks. Gently grasp the tick with tweezers and slowly pull upward to allow the tick to release its bite.
- Wash the bite area with alcohol or soap and water, and contact a health care provider if you develop a fever, headache, fatigue or bull’s-eye rash.